

# Local Data Centers

## Crucial Pillar to India's Digital First Approach

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# Agenda

- Building Resilient & Secure Datacenters
- Decarbonizing Data Centers
- Sustaining Practices in Designing and Building Green DC
- Modernization and Rapid Deployment Measures
- Industry Friendly Regulation, Govt Initiatives and Investments

# Few Facts

- 1:** All Startups have Cloud-First Strategy,  
it allows u to focus on business than on technology
- 2:** Data Security is a Complex Subject
- 3:** Cloud as a utility - Supply Side is increasing fast

# Sustainable Practices in Data Center Design



# Cold and Hot Data ..

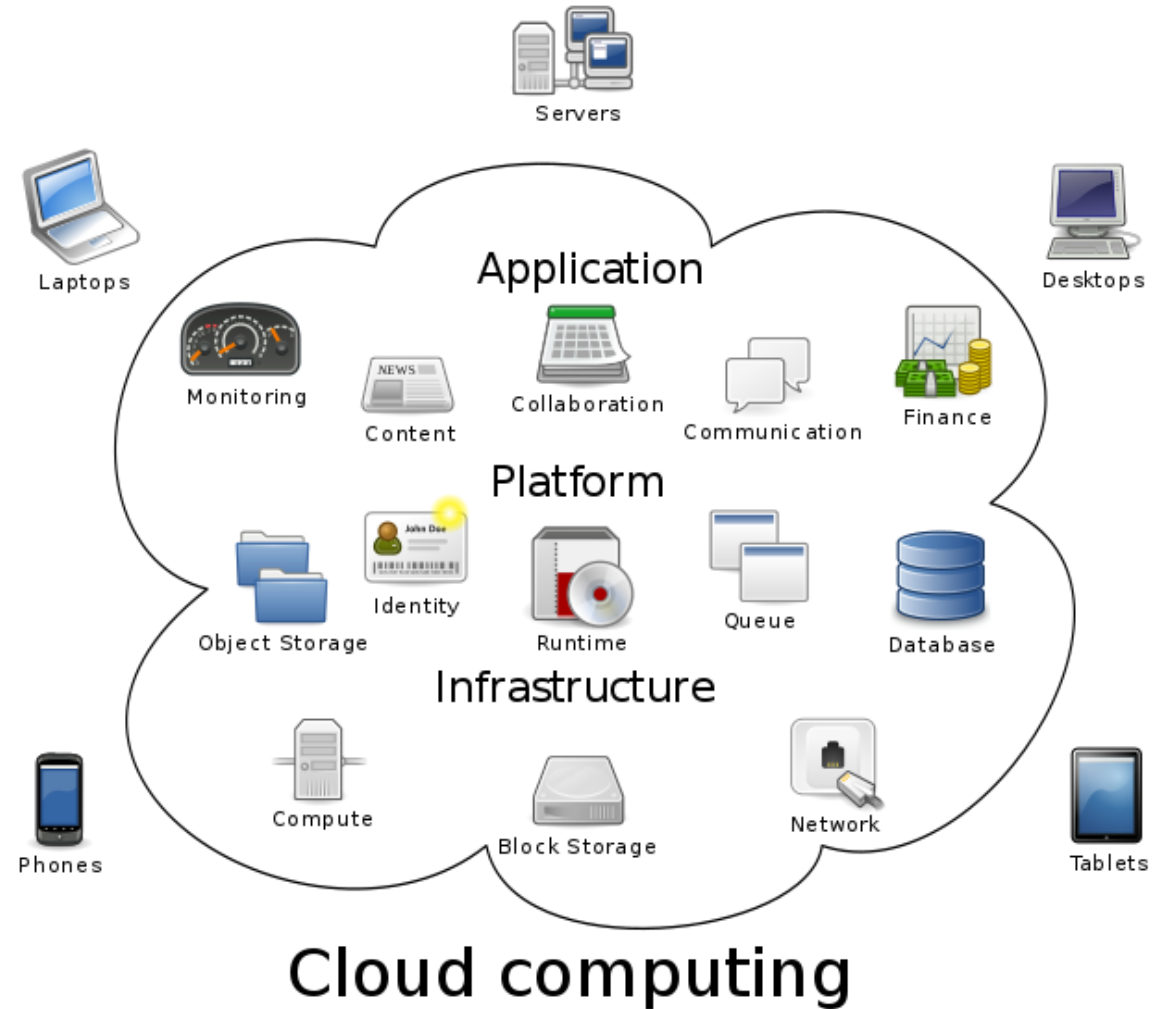
What I have learnt during my data center days

In Data Centers – Data is the BUSINESS and  
Data is the Problem !!

# What is Archival Policy

**Business Agility is Dependent on data agility, which is in turn dependent of making sense out of tons of data sitting in the data centers....**

**So if business decisions are to be fast the CIO and CEO must handshake regularly on the how data is moving in the data centers.**



# Archival Policy.. CEO's job ? May be

**The Cold data – which is NOT required for business decision but may be required for some compliances etc**

**The Hot data – Which is required to get business insights , to take decisions.**

**Hot Data Vs Cold Data Ratio ?  
Petabytes or Giga or Mega**





# Industry Friendly Regulation & Govt Initiatives

# TRAI consultation paper on

## Regulatory framework for promoting Data Economy through Data Centers, CDN and Interconnection Exchanges

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# Important Announcement...

- Data centres that are "housed in a dedicated/centralized building for storage and processing of digital data applications" with a minimum capacity of 5 MW of IT load will be considered for infrastructure status ..11<sup>th</sup> October govt notification
- This will certainly help data centre companies to get easier access to institutional credit at cheaper rates, attract foreign investment.



**Decarbonizing DC ?**

# Green Data Center

## **Keep Measuring** The Power Usage Effectiveness Of Data Centers

- The ratio of how much energy you use to run your IT systems to how much you use for cooling, lighting, and other building services is known as the Power Usage Effectiveness (PUE).
- A PUE of 1 indicates that you are operating at maximum efficiency, using no energy for cooling, lighting, other non-IT systems. **In most cases, a PUE of 1.5 to 1.8 is regarded to be effective.** Assume the majority of people have at least 2.0 or above. **Overcooling**, bad design, and management are all common causes of this.

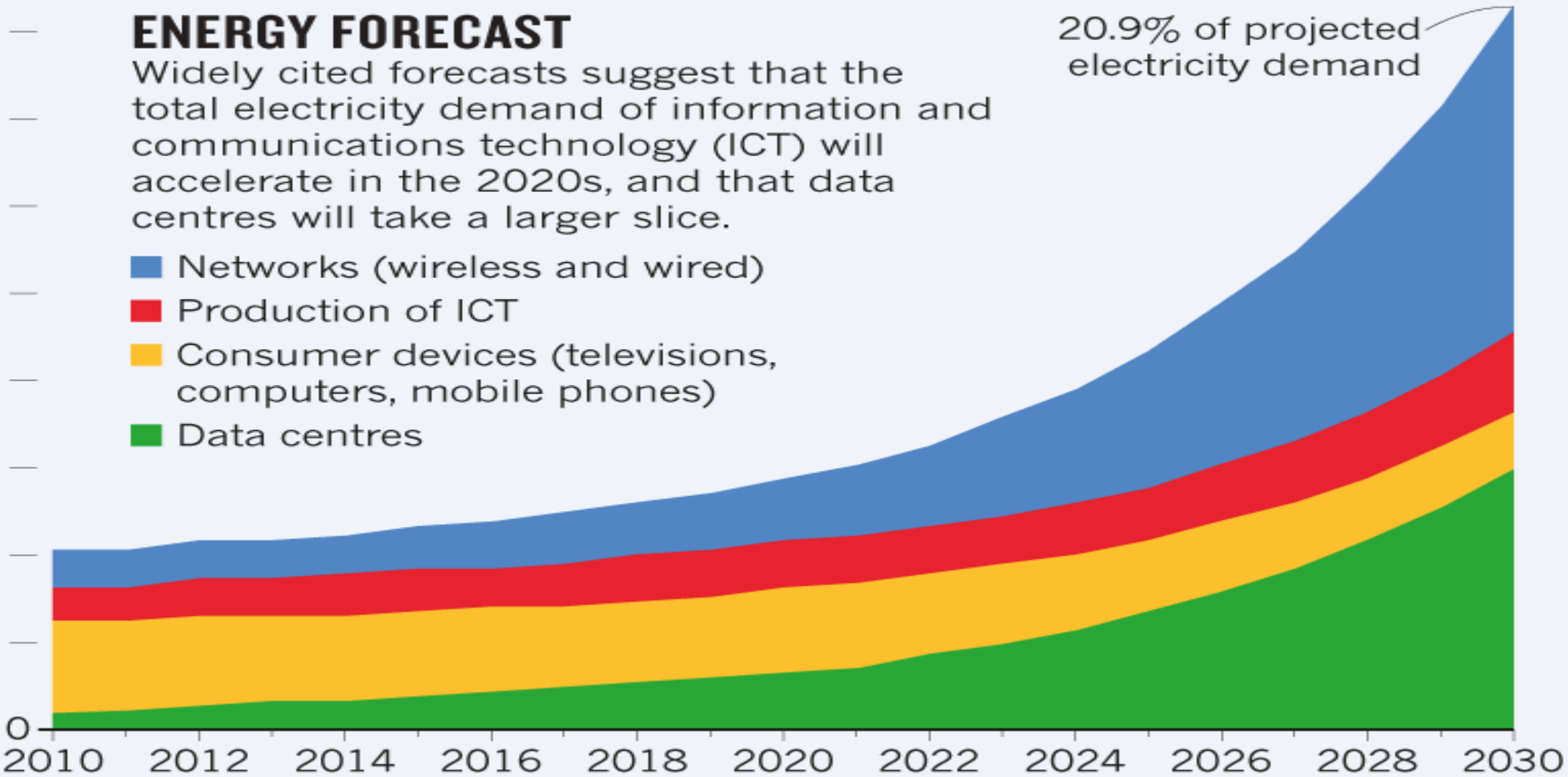
9,000 terawatt hours (TWh)

### ENERGY FORECAST

Widely cited forecasts suggest that the total electricity demand of information and communications technology (ICT) will accelerate in the 2020s, and that data centres will take a larger slice.

- Networks (wireless and wired)
- Production of ICT
- Consumer devices (televisions, computers, mobile phones)
- Data centres

20.9% of projected electricity demand



**Thank You!**

